

The studios' continued investigation into exploring definitions of a sustainable architecture focusses this semester upon patterns of development and re-interpreting the ground to support future inhabitation. To develop an enabling strategy that modifies and adjusts the land, reinforcing the sense of place and providing for the basis of a settlement to be established or extended is to make what we may call a 'Landscape Infrastructure'.

The saddle-backed hill of Maiden Castle dominates the surrounding Dorset landscape in south-west England. First occupied in the Neolithic and early Bronze Age it was subsequently re-settled in the early iron Age and by the Romans and again briefly in the 4th century. It may be seen as a paradigm of a 'landscape infrastructure'. The site was shifted and adjusted to create a framework for settlement which had a special sense of place. The structure of embankments and ridges, originally built for defence now offers opportunities for reverie and hiking. Thus, the original shaping of the ground continues to encourage different kinds of occupation. The garden allotments adjacent to Fulham Palace in south-west London are organised as a pattern of plots to provide domestic horticulture. Accessed by a network of primary and secondary pathways the individuality of each plot becomes evident by the small building structures erected for the storage of garden tools, vine covered terraces for sitting and other structures mostly built from found materials. Water pumps are located strategically at small clearings across the site and communal pavilions provide toilet facilities, a shop and a place to chat. Both examples inspire ideas about patterns of development enabling inhabitation and community.

The projects will explore how the ground of a given site can at first be understood forensically before consideration is given to how it may be adjusted and stabilised to provide for a specific settlement: a caravan park, a social housing cluster, a rural short stay retreat and a light industrial compound. The ecological footprint of the proposals will be a central component to the investigation with an insistence on demonstrating ideas to Re-use, Replenish, Regenerate and the principles of Circularity and passive low-energy use. The enabling strategies that form the basis for the placing of buildings will aim to be both precise and indeterminate at the same time: precise in their form and dimension but also indeterminate in the way that they anticipate use and occupation in an unknown future.

The setting for our projects will be the Balearic Island of Mallorca, a country in which the land is defined so much by its geology and topography. Significantly affected by the detrimental effects of tourism and unsustainable development some local innovators and developers on the islands are positively encouraging the re-growth of local industry that can support the development of an environmental architecture based on permanence and passive technologies and the use of local materials such as Marés stone, Posidonia Oceanica (s'alga) and ceramics. We will engage with these innovators such as IBAVI (Institut Balear de l'Habitatge), other producers and manufacturers and visit important and relevant local architecture in order to inform both the strategy and detail of our projects.

Studio Krucker Bates Landform and Infrastructure Sustainable settlements in Mallorca



Calendar
<p>Week 1 26th/27th April 2022</p> <hr/> <p>Introduction to the Semester by Studio Krucker Bates, Tuesday 11:00 am – present (R 2380) Introduction to exercises one and two</p>
<p>Week 2 3rd/4th May</p> <hr/> <p>Assistant tutorials (exercises one and two)</p>
<p>Week 3 9th–11th May</p> <hr/> <p>Excursion to Mallorca</p>
<p>Week 4 16th–18th May</p> <hr/> <p>Lecture by Bruno Krucker, Monday 11:30 am – present (HS 0360) Pin Up 1 with Stephen Bates (exercises one and two) – present (R 2380) Introduction to exercises three and four</p>
<p>Week 5 24th/25th May</p> <hr/> <p>Assistant tutorials (exercises three and four)</p>
<p>Week 6 30th May – 1st June</p> <hr/> <p>Lecture by Bruno Krucker, Monday 11:30 am – present (HS 0360) Pin Up 2 with Stephen Bates (exercises three and four) – online via Zoom Introduction to exercises five</p>
<p>Week 7 6th–8th June</p> <hr/> <p>Pentecost (tutorials voluntary)</p>
<p>Week 8 14th/15th June</p> <hr/> <p>Assistant tutorials (exercise five)</p>
<p>Week 9 20th–22nd June</p> <hr/> <p>Lecture by Stephen Bates, Monday 11:30 am – present (HS 0360) Pin Up 3 with Stephen Bates (exercises three, four five) – present (R 2380) Introduction to exercise six</p>
<p>Week 10 28th/29th June</p> <hr/> <p>Assistant tutorials (exercise six)</p>
<p>Week 11 5th/6th July</p> <hr/> <p>Assistant tutorials (exercise six)</p>
<p>Week 12 11th–13th July</p> <hr/> <p>Lecture by Stephen Bates, Monday 11:30 am – online via Zoom Pin Up 4 with Stephen Bates (exercises, three, four, five and six) – online via Zoom</p>
<p>Week 13 19th/20th July</p> <hr/> <p>Assistant tutorials (all exercises)</p>
<p>Week 14 26th July</p> <hr/> <p>Final review with Stephen Bates, Bruno Krucker and guest critic – present (R 2380)</p>

Production list

Exercise one: Projection

The first two exercises relate to a given case study that will be provided at the beginning of the semester. This first exercise requires the making of a drawing – an isometric projection, a method for visually representing three-dimensional objects in two dimensions as a technical but also artistic drawing. You will use 70 and 30 degree angles to ensure the surface and object appear equally foreshortened unless an alternative approach is agreed with the teaching assistants for the specific requirements of the case study. The drawing is an exercise to show the ground profile, the landscaping and building objects and it may require the edge of the drawing to show in section. The final presented scale of the drawing will be large (A1 or A0) so that it 'holds' the wall and reveals much detail. This is an opportunity for you to research the case study project fully and to learn from it. The experimentation of this drawing technique will be useful as you will be required to make the same drawing to show your own project later in the semester.

An introduction to this exercise will be given in the first week of the semester.

Exercise three: Strategy

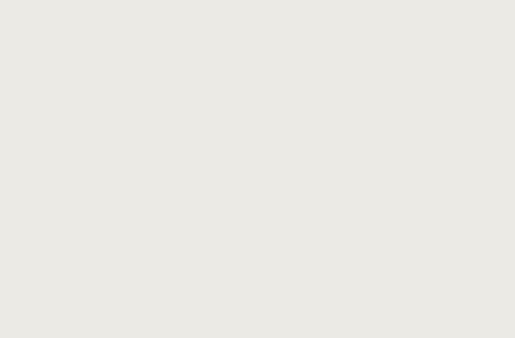
This exercise requires you to study your given site. Analysis will lead to layered diagrams that investigate the various infrastructures bearing upon the site and those that you choose to develop, re-interpret or impose to provide an underlying organisational structure to your project. Working in your group you will use a site model as a tool to help develop a concept for your project. While priority will be given to an extensive exploration of different massing options, you will be expected to produce drawings in the form of sketches and schematic plans and site sections/elevations. Once the direction of your design strategy is clear you will use the techniques learnt through Exercise two to present the completed scheme at a scale of 1:500 together with fine quality figure ground drawings. Closer to the end of the semester you will also make a projection drawing of your project as in Exercise one. An introduction to this exercise will be given in week 4 of the semester.

Exercise five: Construction

With the knowledge you now have, you will investigate the design of the facades of your project in greater detail. Following these studies, you will construct a model of the complete building at 1:100. One area of detail of the building should be made at a scale of 1:20 so that a deeper understanding of materials and junctions can be established. The manner in which this model is made, and the techniques employed to give detail and texture should be considered very carefully. An introduction to this exercise will be given in week 6 of the semester.

Final review

The final review in late July will consider all the work produced during the semester. In addition, you will be asked to prepare a PowerPoint presentation of your project. It is important that you describe the development of your work accurately and precisely and include models of your final project at 1:500, 1:100, 1:50 and 1:20, figure ground diagrams and the case study work. In addition to the material you have already produced you are required to present a 1:1000 site plan and site sections at 1:500 or 1:200.



Exercise two: Topography

The same given case study will be used to make two models. The first is a topographic model at a scale of 1:500 or 1:1000 (depending on the size of the case study given). The second is a detailed model showing one part of the project at a scale of 1:20 or 1:50 (again, depending on the size of the case study given). Both models will be made from Styrofoam modelling foam (supplied by the Chair) using a Hot Wire Foam Cutter and sandpaper. The base of each model must be a minimum of 50mm thick. The final model will be painted an off-white/grey to an NBS colour stipulated by the assistants. Soft landscaping (trees, shrubs etc) will be represented by off white sea foam high quality natural plant material (also provided by the Chair). The extent of each model will be discussed and agreed on with the assistants before the final models are made. As in the first exercise the experimentation of this modelling technique will be useful as you will be required to make the same models to show your own project later in the semester. An introduction to this exercise will be given in the first week of the semester.

Exercise four: Spatial organisation

At this stage in the development of your project we ask you to study the organisation of the landform and building(s) at a larger scale. Study models at a scale of 1:50 should be produced in white foam board to investigate the internal spatial organisation of your project and the interconnection of different rooms and spaces. These models are not intended to be 'complete', but as tools for studying the relationship between floors and across space. At this stage you should be considering what sustainable strategies you are adopting to inform the architecture. An introduction to this exercise will be given in week 4 of the semester.

Exercise six: Small moments

This exercise is intended to allow you to present some of the special situations that you have developed in your design: 'small moments' which reveal the special qualities of your project. These should be described by two models made from foamboard and other materials, including coloured paper and precisely detailed models of objects. You will then photograph each 'small moment' model – only a small amount of Photoshop allowed! The view should be taken at eye level and all vertical lines should be precisely vertical – wide angles or distorted views are not acceptable! A high standard of composition and technique is expected, and the image should convey the atmosphere and character of the project within the city fabric. Great care should be given to the making of the models in order to express the atmosphere that you are seeking to achieve. An introduction to this exercise will be given in week 9 of the semester.